## Amendments to the Claims:

This listing of claims replaces all prior listings, and versions, of claims in the present application.

## **Listing of Claims:**

1. (Original) A wireless access network for providing radio communication of data therein, said wireless access network comprising:

a first-tier mesh formed of a plurality of first-tier nodes, each of the first-tier nodes of the plurality of first-tier nodes capable of communicating data with at least selected others of the first-tier nodes, at least one of the first-tier nodes forming a first-tier sink node;

at least a second-tier mesh formed of a plurality of second-tier nodes, each of the second-tier nodes of the plurality of second-tier nodes capable of communicating data with at least selected others of the second-tier nodes, at least one of the second-tier nodes forming a second-tier sink node, the second-tier sink node further capable of communicating with the first-tier sink node of said first-tier mesh.

- 2. (Original) The wireless access network of claim 1 wherein the first-tier nodes of said first-tier mesh are operable pursuant to first-tier-mesh operational characteristics, and wherein the second-tier nodes of said second-tier mesh are operational pursuant to second-tier-mesh operation characteristics, the first-tier-mesh operational characteristics and the second-tier-mesh operation characteristics being, at least in some part, dissimilar.
- 3. (Original) The wireless access network of claim 2 wherein the first-tier-mesh operation characteristic comprise a first frequency band within which communication of data is effectuated, wherein the second-tier-mesh operation characteristics comprise a second frequency bandwidth within which communication of data is effectuated, the first frequency bandwidth and

Application No 09/833,868 Amendment dated 10 February 2005 Reply to Office Action of 10 November 2004

the second frequency bandwidth having at least plurality nonoverlapping portions.

- 4. (Original) The wireless access network of claim 1 wherein at least one first-tier node of said first-tier mesh and at least one second tier node of said second-tier mesh are co-located, the at least one first-tier node co-located with the at least one second-tier node capable of communicating with the at least selected others of the first-tier-nodes and the at least one second-tier node co-located with the at least one first-tier node capable of communicating with the at least selected others of the second-tier nodes.
- 5. (Currently Amended) A wireless access network for providing radio communication of data therein, said wireless access network comprising:

a first-tier mesh formed of a plurality of first-tier nodes, each of the first-tier nodes of the plurality of first-tier nodes capable of communicating data with at least selected others of the first-tier nodes, at least one of the first-tier nodes forming a first-tier sink node;

at least a second-tier mesh formed of a plurality of second-tier nodes, each of the second-tier nodes of the plurality of second-tier nodes capable of communicating data with at least selected others of the second-tier nodes, at least one of the second-tier nodes forming a second-tier sink node, the second-tier sink node further capable of communicating with the first-tier sink node of said first-tier mesh; and

## The wireless access network of claim 1

wherein said first-tier mesh comprises an ad-hoc mesh which exhibits an ad-hoc configuration and an ad-hoc number of first-tier nodes.

- 6. (Original) The wireless access network of claim 5 wherein the first-tier nodes comprises mobile nodes capable of movement throughout a selected area.
  - 7. (Original) The wireless access network of claim 5 wherein communication of data is

Application No 09/833,868 Amendment dated 10 February 2005 Reply to Office Action of 10 November 2004

effectuated pursuant to NLOS (non line of sight) communication techniques.

8. (Currently Amended) A wireless access network for providing radio communication of data therein, said wireless access network comprising:

a first-tier mesh formed of a plurality of first-tier nodes, each of the first-tier nodes of the plurality of first-tier nodes capable of communicating data with at least selected others of the first-tier nodes, at least one of the first-tier nodes forming a first-tier sink node;

at least a second-tier mesh formed of a plurality of second-tier nodes, each of the second-tier nodes of the plurality of second-tier nodes capable of communicating data with at least selected others of the second-tier nodes, at least one of the second-tier nodes forming a second-tier sink node, the second-tier sink node further capable of communicating with the first-tier sink node of said first-tier mesh; and

The wireless access network of claim-1

wherein said second-tier mesh comprises a pre-configured mesh which exhibits a fixed configuration and a fixed number of second-tier nodes.

- 9. (Original) The wireless access network of claim 8 wherein the second-tier nodes are stationary.
- 10. (Currently Amended) The wireless access network of claim 9 wherein communication of data is effectuated pursuant to LOS (line of sight) communication techniques.
- 11. (Currently Amended) A wireless access network for providing radio communication of data therein, said wireless access network comprising:

a first-tier mesh formed of a plurality of first-tier nodes, each of the first-tier nodes of the plurality of first-tier nodes capable of communicating data with at least selected others of the first-tier nodes, at least one of the first-tier nodes forming a first-tier sink node;

at least a second-tier mesh formed of a plurality of second-tier nodes, each of the second-tier nodes of the plurality of second-tier nodes capable of communicating data with at least selected others of the second-tier nodes, at least one of the second-tier nodes forming a second-tier sink node, the second-tier sink node further capable of communicating with the first-tier sink node of said first-tier mesh; and

The wireless access network of claim 1 further comprising:

a third-tier mesh formed of a plurality of third-tier nodes, each of the third-tier nodes of the plurality of third-tier nodes capable of communicating data with at least selected others of the third-tier nodes, at least one of the third-tier nodes forming a third-tier sink node.

- 12. (Currently Amended) The wireless access network of claim 11 wherein the first-tier nodes of said first-tier mesh are operable pursuant to first-tier mesh operational characteristics wherein the second-tier nodes of said second-tier mesh are operational pursuant to second-tier-mesh operational characteristics, and wherein the their-tier nodes of said third-tier mesh are operational pursuant to [[t]] third-tier-mesh operational characteristics, the first-tier, second-tier, and third-tier mesh operational characteristics, respectively, being at least in some part dissimilar.
- 13. (Currently Amended) The wireless access network of claim 11 wherein said th[[e]]ird-tier mesh comprises a point-to-point mesh which exhibits a fixed configuration and a fixed number of third-tier nodes.
- 14. (Currently Amended) The wireless access network of claim 13 wherein communication of data between the th[[e]]ird-tier nodes is effectuated pursuant to LOS (line-of-sig[[n]]ht) communication techniques.
  - 15. (Currently Amended) A wireless access network for providing radio

Application No 09/833,868 Amendment dated 10 February 2005 Reply to Office Action of 10 November 2004

communication of data therein, said wireless access network comprising:

a first-tier mesh formed of a plurality of first-tier nodes, each of the first-tier nodes of the plurality of first-tier nodes capable of communicating data with at least selected others of the first-tier nodes, at least one of the first-tier nodes forming a first-tier sink node;

at least a second-tier mesh formed of a plurality of second-tier nodes, each of the second-tier nodes of the plurality of second-tier nodes capable of communicating data with at least selected others of the second-tier nodes, at least one of the second-tier nodes forming a second-tier sink node, the second-tier sink node further capable of communicating with the first-tier sink node of said first-tier mesh; and

## The wireless access network of claim 1

wherein the at least one of the first-tier nodes forming the first-tier sink node comprises a first first-tier node forming a first first-tier sink node and at least a second first-tier node forming a second first-tier sink node, wherein the at least one of the second-tier nodes forming the second-tier sink node comprises a first second-tier node forming a first second-tier sink node and at least a second, second-tier node forming a second second-tier sink node, the first first-tier sink node capable of communicating with the first second-tier sink node, the second first-tier sink node capable of communicating with the second second-tier sink node, and the first and second second-tier sink nodes, respectively, capable of communicating therebetween.

- 16. (Original) The wireless access network of claim 15 further comprising an other of the second-tier nodes of said second-tier mesh positioned between the first second-tier sink node and the second second-tier sink node, communications between the first and second second-tier sink nodes effectuated by way of the other of the second-tier nodes.
- 17. (Original) The wireless access network of claim 15 wherein data communicated between the first-tier nodes of said first-tier mesh is communicated at a first data rate, wherein data communicated between the second tier nodes of said second-tier mesh is communicated at a

second data rate, the second data rate greater than the first data rate such that data communicated between the first and second first-tier sink nodes is communicated more quickly by way of the first and second second-tier sink nodes than by way of the first-tier nodes of said first-tier mesh.

Claims 18-19. (Canceled)

20. (Original) A method for providing for communication in a method for communicating data, and improvement of a method for forming a wireless access network providing for communication therein, said method comprising:

forming a first-tier mesh of a plurality of first-tier nodes, each of the first-tier nodes capable of communicating data with at least selected others of the first-tier nodes, at least one of the first-tier nodes forming a first-tier sink node; and

forming a second-tier mesh of a plurality of second-tier nodes, each of the second-tier nodes of the plurality of second-tier nodes capable of communicating data with at least selected others of the second-tier nodes, at least one of the second tier nodes forming a second-tier sink node further capable of communicating with the first-tier sink node of the first-tier mesh formed during said operation of forming the second-tier mesh.

21. (New) The wireless access network of claim 1 wherein at least one first-tier node of said first-tier mesh and at least one second tier node of said second-tier mesh are not colocated, the at least one first-tier node located distant from the at least one second-tier node capable of communicating with the at least selected others of the first-tier-nodes and the at least one second-tier node located distant from the at least one first-tier node capable of communicating with the at least selected others of the second-tier nodes.